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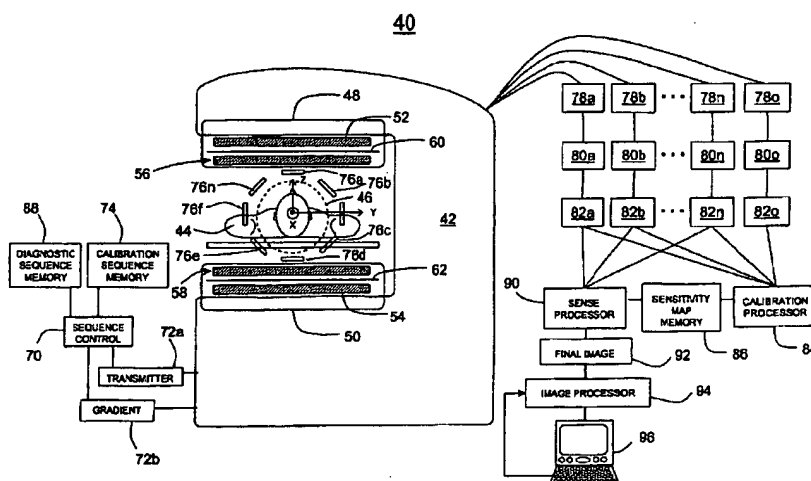
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(54) Title: **COIL SENSITIVITY ESTIMATION FOR PARALLEL IMAGING**



(57) Abstract: In a parallel or SENSE imaging technique in an MRI system (40), a calibration scan is conducted to generate a calibration image (86) indicative of sensitivity profiles of parallel imaging coils (76a,...,76n) also in the regions where the magnetic field is distorted. This is accomplished by using a phase refocusing imaging protocol such as a spin echo technique, or by using a gradient echo technique where the echo time is very short. In addition, the phase encode direction of the calibration scan and a diagnostic imaging scan shall be matched. A diagnostic imaging scan is conducted using a diagnostic scan protocol to generate a diagnostic image representation from each parallel imaging coil. A SENSE processor (90) reconstructs a final diagnostic image (92) from the diagnostic image representations and the coil sensitivity profiles.



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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